

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/655,854
 Applicant : Rafael Reif
 Filed : September 5, 2003
 T.C./A.U. : 2826
 Examiner : Leonardo Andujar

Confirmation No.: 7254

Docket No. : MIT-136AUS
 Customer No. : 22494

INTERVIEW SUMMARY

Commissioner for Patents
 P. O. Box 1450
 Alexandria, VA 22313-1450

Dear Sir:

Applicant would like to make of record a conference call, which took place between Examiner Andujar and Applicant's representative Christopher S. Daly on September 13, 2007.

During the interview, the following documents were discussed:

- 1) claim 40 of the above-identified application;
- 2) Examiner remarks under the heading "Response to Arguments" in the Office Action dated May 10, 2007 (beginning on page 12 and ending on page 13 of the Office Action); and
- 3) Col. 10, lines 37-55 of US Patent no. 6,525,415 (Koyanagi et al.).

During the interview, Applicant's representative pointed out that claim 40 called for "a conductive bond film" (emphasis supplied) and that the portion of the reference relied upon by the Examiner in the rejection of claim 40 (i.e. Col. 10, lines 37-46 of the Koyanagi patent) referred to "tacking" of the microbumps 42C and 42D. Applicant's representative requested a clarification of the Examiner's interpretation of the word

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"tacking." The Examiner explained that his interpretation of the word "tacking" was that it had the same meaning as the word "bonding."

Applicant's representative stated that he believed that the generally understood meaning of the word "tacking" in this art field, indicates a temporary connection while the word "bonding" in this art field is generally understood to indicate a permanent or secure fastening of two items (e.g. two substrates). Applicant's representative also pointed out that Koyanagi at Col. 10 lines 47-55 specifically states that a "resin epoxy" is used for "bonding the second semiconductor substrate 30 and the third semiconductor substrate 40...." (emphasis supplied). The Examiner explained that his view of the Koyanagi reference was that the epoxy resin 50 was not needed to hold the substrates 30 and 40 together and that the tacking of the substrates 30 and 40 via the microbumps 42 was sufficient to bond the substrates 30 and 40. Thus, the Examiner again clarified that in his view, the meaning of the word "tacking" in the Koyanagi reference conveyed the same as the meaning as the word "bonding" used in Applicant's claim 40.

The Examiner and Applicant's representative also discussed Fig. 5 of the Koyanagi reference. The Examiner initially took the position that this figure illustrated two microbumps which had been joined into a single microbump (identified with reference numeral 42 in Fig. 5 of Koyanagi). Applicant's representative pointed out that the Koyanagi reference at Col. 11, lines 15-21 stated that Fig. 5 showed an alternate embodiment having a single microbump 42 and two substrates 30, 40. As explained in Koyanagi, the single microbump 42 is provided on only one of the substrates 30, 40 and the substrates 30, 40 are bonded by an epoxy resin (which is identified with reference numeral 50 in Fig. 5 of the Koyanagi reference).

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Applicant's representative took the position that this was further evidence that the Koyanagi microbumps are not used to bond or secure the two substrates 30, 40, but rather the resin epoxy 50 in Koyanagi bonds the two substrates 30, 40.

Applicant would like to thank the Examiner for his courtesy in granting the interview

Dated: 14 Sep 07

Respectfully submitted,

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